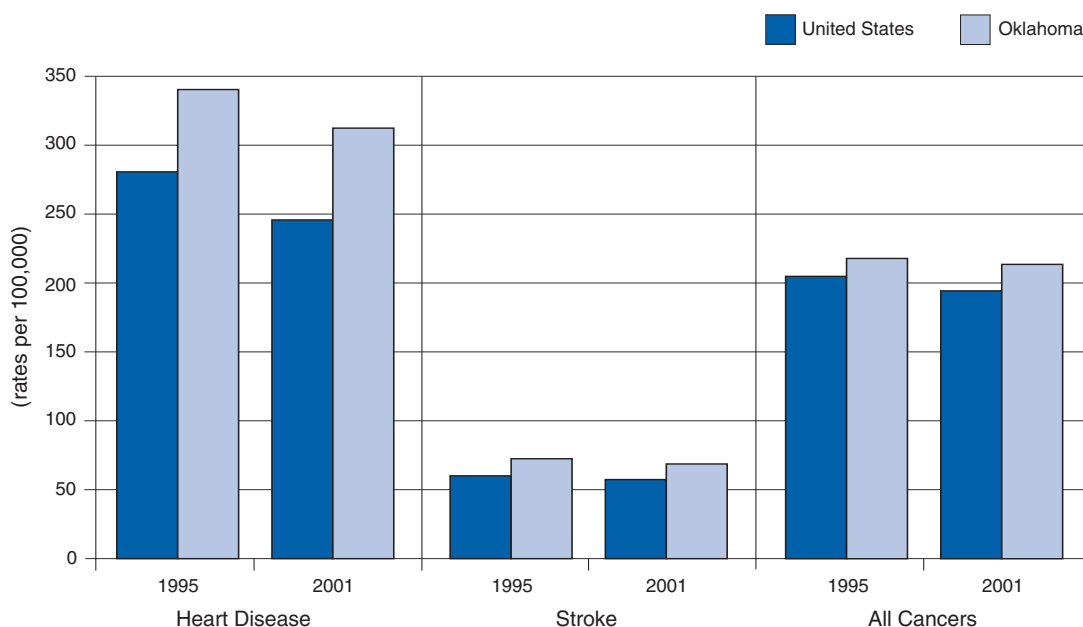


## Chronic Diseases: The Leading Causes of Death

### The Leading Causes of Death

United States and Oklahoma, 1995 and 2001



Source: National Center for Health Statistics, 2003

### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### Reducing the Burden of Chronic Disease

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.

# The Leading Causes of Death and Their Risk Factors

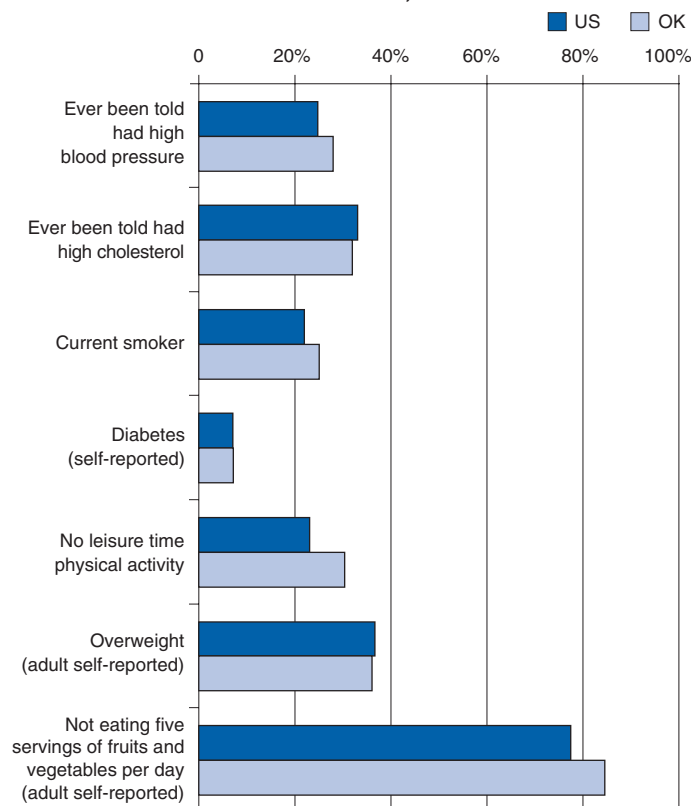
## Heart Disease and Stroke

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Oklahoma, accounting for 10,840 deaths or approximately 31% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,384 deaths or approximately 7% of the state's deaths in 2001.

### Prevention Opportunities

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

Risk Factors for Heart Disease and Stroke, 2003



Source: BRFSS, 2004

## Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 7,640 are expected in Oklahoma. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 18,540 new cases that are likely to be diagnosed in Oklahoma.

Estimated Cancer Deaths, 2004

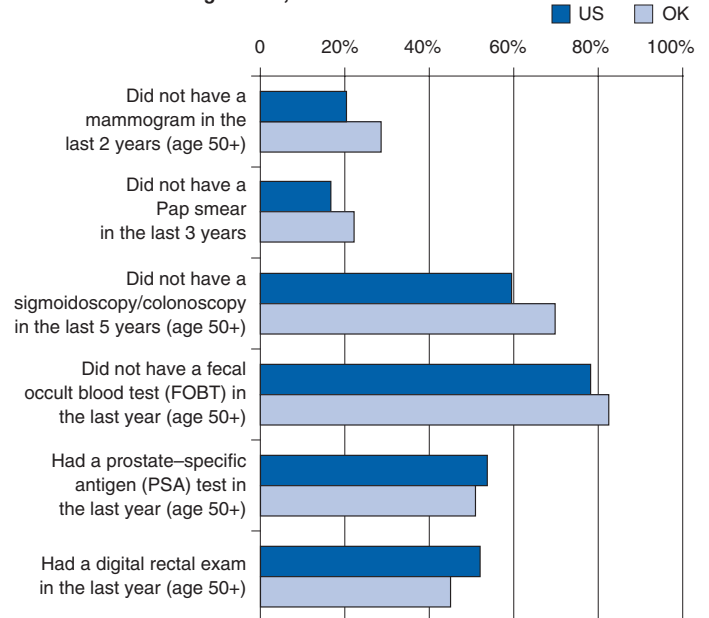
Cause of death	US	OK
All Cancers	563,700	7,640
Breast (female)	40,110	540
Colorectal	56,730	800
Lung and Bronchus	160,440	2,370
Prostate	29,900	340

Source: American Cancer Society, 2004

### Prevention Opportunities

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

Preventive Screening Trends, 2002



Source: BRFSS, 2003

# Oklahoma's Chronic Disease Program Accomplishments

## Examples of Oklahoma's Prevention Successes

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among white men (278.7 per 100,000 in 1990 versus 263.5 per 100,000 in 2000).
- A 16.7% decrease in the number of women older than age 50 who reported not having had a mammogram in the last 2 years (from 45.3% in 1992 to 28.6% in 2002).
- A lower mortality rate than the corresponding national rate for female breast cancer among women of all races (25.6% in Oklahoma versus 26.7% nationally).

## CDC's Chronic Disease Prevention and Health Promotion Programs

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Oklahoma in the areas of cancer, heart disease, stroke, and related risk factors.

### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Oklahoma, FY 2003

<b>SURVEILLANCE</b>	
Behavioral Risk Factor Surveillance System (BRFSS) <i>Oklahoma BRFSS</i>	\$141,259
National Program of Cancer Registries <i>Oklahoma Central Cancer Registry</i>	\$296,739
<b>CHRONIC DISEASE PREVENTION AND CONTROL</b>	
Cardiovascular Health Program <i>Worksite Risk Reduction and Disease Management Pilot Project</i>	\$300,000
Diabetes Control Program <i>Diabetes Control and Prevention Program</i>	\$248,580
National Breast and Cervical Cancer Early Detection Program <i>Oklahoma's Breast and Cervical Cancer Early Detection Program</i>	\$1,546,000
National Comprehensive Cancer Control Program <i>Oklahoma Comprehensive Cancer Control Program</i>	\$129,118
<b>WISEWOMAN</b>	\$0
<b>MODIFYING RISK FACTORS</b>	
National Tobacco Prevention and Control Program <i>Oklahoma Tobacco Prevention and Control Program</i>	\$1,408,160
<b>State Nutrition and Physical Activity/Obesity Prevention Program</b>	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010) <i>Association of American Indian Physicians</i>	\$283,725
<i>Oklahoma State Department of Health</i>	\$905,008
<i>The Choctaw Nation of Oklahoma</i>	\$270,285
<b>Total</b>	<b>\$5,528,874</b>

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

### Additional Funding

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Oklahoma that fall into other health areas. A listing of these programs can be found at <http://www.cdc.gov/nccdphp/states/index.htm>.

# Opportunities for Success

## Chronic Disease Highlight: Cardiovascular Disease

Cardiovascular disease (CVD), primarily heart disease and stroke, are the nation's leading causes of death among both men and women of all racial and ethnic groups.

2001 CDC mortality data indicate that Oklahoma had the third highest heart disease death rate and the 10<sup>th</sup> highest stroke death rate in the nation. From 1996 to 2000, Oklahoma had heart disease death rates that were higher than the national average (629 per 100,000 versus 536 per 100,000). Oklahoma also had higher stroke death rates than the national average (131 per 100,000 versus 121 per 100,000).

CVD is easily prevented by modifying behavioral risk factors such as nutrition, high blood pressure, physical inactivity, and smoking. Oklahoma's residents, however, have high rates for all of these risk factors. According to 2003 data from CDC's Behavioral Risk Factor Surveillance System, only 15.4% of Oklahomans reported consuming 5 or more servings of fruits and vegetables per day, compared to 22.5% nationally. Almost 60% of people in the state did not meet the recommended guidelines for moderate physical activity, compared to 52.5% nationally, and the percentage of smokers in Oklahoma was higher than the national rate (25.1% versus 22.0%). In addition, 28.0% of Oklahomans reported having been told that they had high blood pressure, compared to the national rate of 24.8%.

Disparities also exist for CVD death rates among racial and ethnic minorities and women. African Americans in Oklahoma have the highest heart disease and stroke rates (741 per 100,000 and 165 per 100,000, respectively); these rates are also higher than the national death rates for these diseases among African Americans (662 per 100,000 for heart disease and 166 per 100,000 for stroke). Women in Oklahoma also have higher than average CVD death rates, with heart disease death rates of 513 per 100,000 (versus 438 per 100,000 nationally) and stroke death rates of 128 per 100,000 (versus 117 per 100,000 nationally).

The Oklahoma State Department of Health began receiving funds from CDC in 2000 to support a state heart disease and stroke prevention program, the Oklahoma Heart Disease and Stroke Health Program. One of the program's achievements has been to provide funding to rural communities to purchase automated external defibrillators (AEDs) and to train potential users. The program is also addressing health systems improvements for stroke and heart attack response and care in selected rural areas.

Text adapted from *Cardiovascular Disease in Oklahoma: An Overview* (2001).

## Disparities in Health

Across the country, American Indians and Alaska Natives (AI/ANs) comprise more than 500 federally recognized tribes and represent 1% of the U.S. population. Compared with other racial and ethnic minorities, AI/ANs have the highest poverty rate, 26%, which is 2 times the national rate. In addition to high poverty levels, AI/ANs are experiencing growing health disparities. Much of the data on health disparities among the AI/AN population are from the Indian Health Service (IHS). The Oklahoma IHS office is the agency's largest regional office and provides health care to over 281,000 AI/ANs throughout Oklahoma, northeastern Kansas, and Eagle Pass, Texas.

Preventable diseases—heart disease, cancer, accidents, diabetes, and cerebrovascular diseases—are the leading causes of death among AI/ANs in the IHS Oklahoma area. These diseases accounted for the top five causes of death among AI/ANs between 1994 and 1996. Heart disease represented almost 30% of these deaths. From 1996 to 2000, heart disease death rates among AI/ANs in Oklahoma were above the national average (402 per 100,000 versus 352 per 100,000). Cancer accounted for nearly 20% of the deaths in the Oklahoma area during the same period.

Throughout the nation, IHS data indicate that diabetes is the second leading cause of outpatient visits and the eighth leading cause of death. In the Oklahoma City area, from 1994 to 1996, IHS data indicate that diabetes was the 5<sup>th</sup> leading cause of death for AI/ANs, with a mortality rate of 24.6 per 1,000 and accounted for approximately 6% of all deaths among AI/ANs.

## Other Disparities

- **Breast Cancer:** The percentage of African American women in Oklahoma who have not had a mammogram in the last 2 years (32.0%) is higher than the percentage for white women (28.9%), and more African American women die from breast cancer (35 per 100,000) than white women (25.8 per 100,000).
- **Obesity:** Hispanics and African Americans in Oklahoma are more likely to be obese than whites: 32.6% of Hispanics are obese compared with 28.3% of African Americans, and 22.6% of whites.
- **High Blood Pressure:** African Americans in Oklahoma are more likely to report having been told that they have high blood pressure than whites (34.2% of African Americans have high blood pressure, compared with 28.5% of whites).

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For more information, additional copies of this document, or copies of publications referenced in this document, please contact the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Mail Stop K-42, 4770 Buford Highway NE, Atlanta, GA 30341-3717 | Phone: (770) 488-5706 | Fax: (770) 488-5962  
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